ITALIAN COOPERATION FOR DEVELOPMENT

ANNUAL REPORT

1992

TB Control Programme Among Afghan Refugees
N.W.F.P

ITALIAN COOPERATION for DEVELOPMENT
TB CONTROL PROGRAMME N.W.F.P.

In the tables and graphics enclosed we point out some relevant records of the 1992 activities , concerning both the laboratories activities performed by all the labs included in the TBCP and the BHUs activities (case finding, treatment, follow up, registration of the patients, etc.)
The AFB + outcome was analyzed on the patients put under treatment during the year 1991.
Finally a study on the failure sputum positive patients treated with the retreatment regimen (introduced in the program since August 1990) and a study made by our Referral Laboratory on the Secondary Resistance to the TB drugs follow.
In 1992 some C/S tests were done for Pakistani failure patients too, sent by the Chest Unit-LRH Hospital and by the District TB Clinic/Peshawar. The results of such tests are analyzed and compared with those of the patients sent by the TBCP among the Afghan Refugees.

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LABORATORIES REPORT

The report of the laboratories activities in the province as a whole for the year 1992 shows a sharp decrease in the total number of slides performed (80442, with an average of 147 slides per month and per lab.) compared with the previous year (112900 and 208 average/month), and the slides and the patients found to be positive have decreased accordingly.
This is matching the lower expected incidence and the lower refugees population, but the decreased efficiency of many facilities after the beginning of the repatration has to be considered too (i.g. lack of malaria supervisors in some BHU, end of activities in some lab., etc)
7 labs out of 50 were closed during 1992.
All performances of some peripheral lab, not belonging to hospitals, were very poor, particularly in the second half of the year, and this fits on the coincident poor performances of some BHU in the same areas.

The ratio between the new positive patients and the total new patients examined was 5.36%, which matches what internationally accepted.
The total number of patients found to be positive was 1333, while 1486 were registered in the various facilities in the same period (1463 as new and 23 as after being lost).
Thus 153 patients (=10,29%) either had the sputum examined elsewere or were not properly recorded in the Lab. registers.
Actually such disparity is due to SRCS figures (840 AFB+ new or after being lost patients were put under treatment while only 630 were diagnosed by SRCS labs). Some relapse patients might have been wrongly labelled as already "under treatment", but most of such difference is problably due to patients diagnosed in some other hospital in Peshawar not included in the programme and then sent to Kacha Gari hospital for treatment.
If we don't consider the SRCS figures, in all the other agencies reports we see that the AFB+ patients diagnosed in the labs are slightly more than those put under treatment in the various facilities (as usual because a few patients don't return to the BHU after their sputa are collected)
This means that, compared to previous years, the attendance of TB patients increased not only in the hospitals of the programme but in other hospitals as well, and then they are referred to the main TB hospital in Kacha Gari.

The average slides per patient were 2.45, while the required number should be 3. This shows a mild improvement with the previous year (2.43).
The workload was even more than in the past greater in the central (and in Peshawar over all) than in the pheripheral districts, and in the hospitals than in the laboratories located in the refugees camps.

LAB	N.W.F.P		**Nº REPORTS :**	547
Period :	Jan-92	Dec-92		

Slides exam.	Tot.(+)slides	New Pat. exam.	New (+) Pat.	UT Pat exam.	UT (+) Pat.
80442	5474	24850	1333	8040	1031

Mean No. of slides per Patient	2.45
Ratio new (+) pat./ total new pat examined	5.36%
Ratio UT (+) pat./ total UT examined	12.82%
Average daily no. of slides in the period	6.13
Minimum monthly no. slides in the period	0
Maximum monthly no. slides in the period	3927
Average slides per month	147.06

BHUs REPORT

A substantial repatration of the Afghan Refugees took place in 1992, and mainly in the months of August-September. As a result of it the figures of UNHCR for the refugees show a decrease of almost one million people between December 91 and December 92.
Such decrease was not homogeneous throughout the various districts and the various months of the year, so we assessed the average population by district adding the figures of each month and then dividing by twelve.
The result is a population assessment much higher then the present refugees population in NWFP, but it is more reliable since we have to consider the case finding and the expected incidence during the whole 1992.
To these figures we should add the unregistered refugees, and for the last months of the year the new refugees mainly from Kabul, and furthermore some families who returned their cards and still are in NWFP.
So we think that our catchment population in 1992 was larger than the average figures we assessed.

In 1992 the new **sputum positive** cases were **1463**, the new **sputum negative 1389** (1508 were registered, and then 119 were stopped because their X-Ray was not active TB suggestive) and the **extrapulmonary 1716** (1729 registered and 13 stopped).
The decrease of the pulmonary cases compared to the previous year is an effect of the decreased average population, and among them the sputum positive are 50 % as epidemiologically expected (for the first time the sputum positive are slightly more than the sputum negative).
For the extrapulmonary cases only there has not been any significant decrease, despite the decrease of the refugees population. Thus they represent 37.5% of the total, which is a little higher than expected (about one third of the total cases)

The case finding activity on sputum positive patients was good in 1992, according to the Annual Risk of Infection assessed by previous tubercoline surveys ('85 and '89) and to the consequent Expected Incidence. While we consider as **minimum acceptable a case finding of 60%** of the expected incidence, **in the N.W.F.P.** as a whole **96%** was reached.
This percentage (**corrected coverage**) was determined after the Pakistani patients and the relapse cases were deducted from the total case finding. We deducted also all the patients registered as coming from Afghanistan and who didn't belong to the refugees population, but some facilities didn't

record the addresses of the patients and so some of them could have been still wrongly labelled as refugees.
Even considering this group of patients, and the unregistered refugees as well, the total case finding ratio is significantly higher than the 60% minimum acceptable and it is close to the 100% of the expected incidence. Therefore we may feel that the case finding activities as a whole were satisfactory and that our goal was achieved.

The large discrepancies among single districts (more then 200% in Peshawar district, less then 20% in some pheripheral districts and tribal areas) were confirmed.
The trend to an increased confidence in the hospitals was confirmed too. More than 50% of the total case finding was in Kacha Gari in Peshawar. South and North Wasiristan and Kurram had a good or acceptable case finding because of the presence of hospitals.
In Chitral the case finding has increased to more than 100 % of the expected incidence, but almost 50% of it was in D.A.C. hospital.
In many peripheral districts without hospitals the case finding was very low, and in some cases even lower than in the previous years.
To the usual causes (higher confidence by the patients and more facilities in the hospitals than in the BHUs) we should add this year the problems which arose in many BHUs because of the repatration.
In the whole province 28 facilities out of 189 were closed during 1992, but in many of them the staff was reduced, or they were downgraded from BHUs to SHUs. At least 10 more facilities were closed from January 1993.
This has problably decreased the efficiency of many BHUs and thus the trust of the patients.
Not only the case finding but the follow up too was not satisfactory in many BHUs (i.g. a decrease of all performances compared to the previous years has affected in many districts the UNHCR BHUs), and this can be partially due to the loss of organization because of the repatration and the reduction of the staff.
In any case we see that in Mansehra, Haripur and Kohat districts the case finding was good or acceptable despite the lack of hospitals, and in these districts all the activities are satisfactory since years, considering both the FSMOs and the volags.
Thus the organizational problems are not the only cause of the poor performances, and the responsibility of the Medical Officers should be implied as well.

In the hospitals it is difficult or impossible to trace the defaulters, and last year we already saw that the increased confidence in hospitals on one hand increases the case finding but on the other hand weakens the success rate.

Since the total patients diagnosed in hospital further increased, the lost patients were expected to increase accordingly.
Furthermore in 1992 the repatration started, and despite our policy for it (90 AFB+, 142 AFB-, 159 EP were recorded as repatriated and given TB drugs for at least three months), some of the patients recorded as lost could actually be repatriated instead.
That may explain the increase in 1992 of the "lost" (i.g. 16,2% of the total input for the AFB+, while such figure was below 13% in 1991).
At the mean time a mild decrease was recorded for the "transferred out" (7% in 1992 versus more than 8% in 1991 for the AFB+).
Anyhow considering the problems that such a huge repatration in such a short time implies, we think that the number of lost patients was still kept within an acceptable degree.

REPORT

District/Agency : ICD

BHU : ALL BHUs		No of reports 2147
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

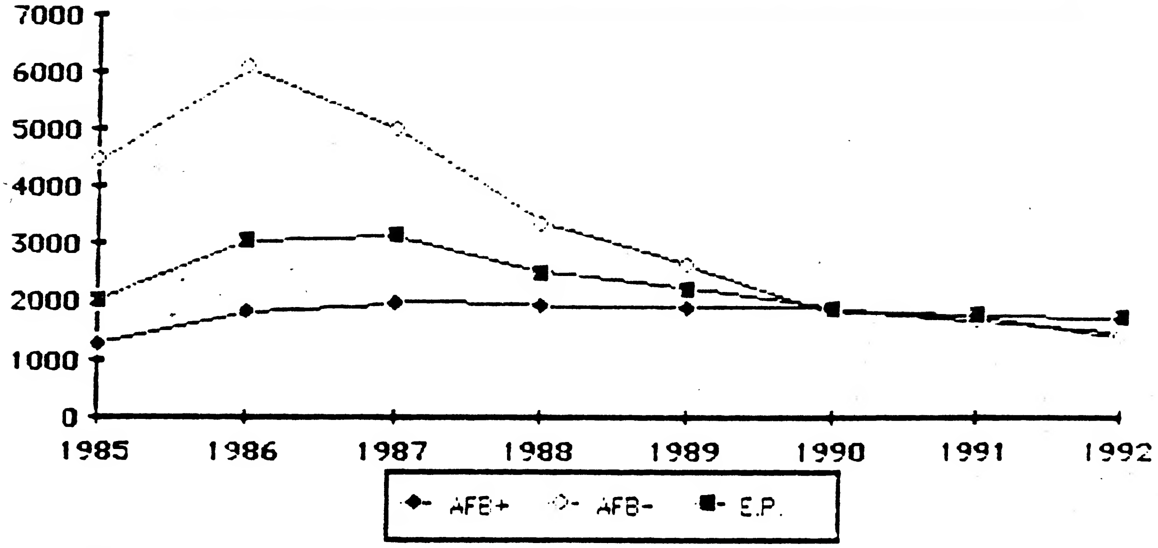
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	63533	2941	24424	1289
Under Treatment (old patients)	16063	2481	8048	1031
TOTAL	79596	5422	32472	2320

B. TREATMENT ACTIVITIES

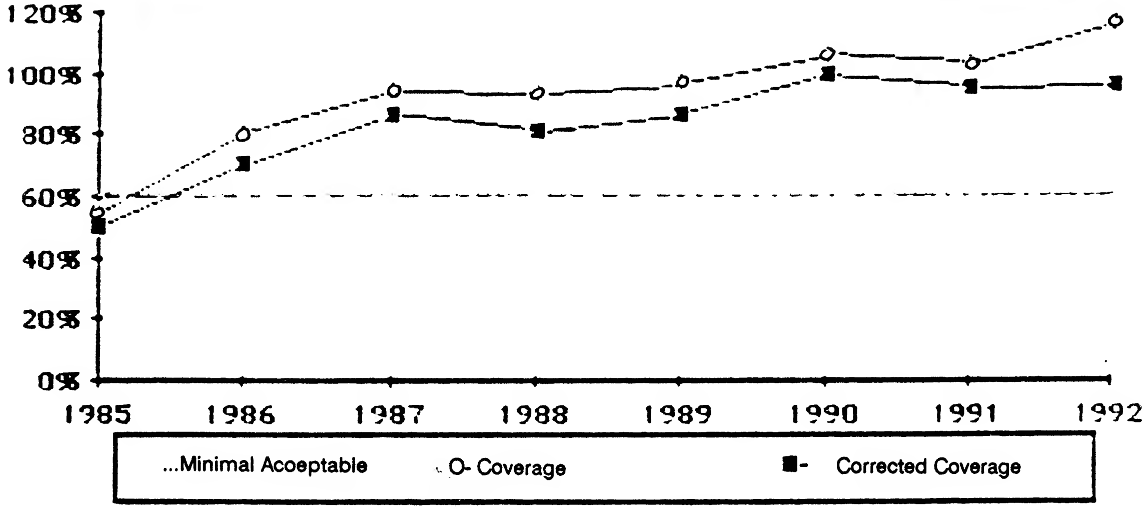
*********/ TYPE OF DISEASE		Nº of PULMONARY CASES			Nº Extra-P.
	CASES/ ***********	Smear (+)ve	Smear (-)ve	Total	cases
a	On treat. end previous per.	1067	1416	2483	1352
b	new cases reg. this period	1463	1508	2971	1729
in	start. again after being lost	23	13	36	20
put	transferred in this period	62	249	311	168
c	Total= (a)+(b)	2615	3186	5801	3269
	completing treat. this period	1126	1243	2369	1158
out	died during this period	39	39	78	12
put	transferred out this period	182	252	434	297
	lost during this period	425	465	890	567
	Nº of cases stopped this per.	**********	119	**********	13
	Nº of cases Repatriated	90	142	232	159
d	TOTAL	1862	2260	4122	2206
e	Under treatment at the end of the period: (c)-(d)	753	926	1679	1063
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total nº of TB patients on treatment at the end of per. :			2742	

	1992	1991
No of sputa examined / patient:	2.45	
ratio new AFB(+)reg/new pulm.pat:	49.24%	
AFB(+) lost/(output - transf. out):	26.73%	
AFB(-) Lost/(output - transf. out):	26.62%	

N.W.F.P. Case Finding Activities for Categories of T.B. Patients



N.W.F.P.
Case Finding Coverage % of Expected Incidence



REPORT

District/Agency : UNHCR

BHU : ALL BHUs		No of reports 1136
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patient. examined	Nº of patien. found (+) ve
New attendants of the clinic	9685	477	3454	173
Under Treatment (old patients)	2173	152	743	57
TOTAL	11858	629	4197	230

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	167	342	509	268
b	new cases reg. this period	192	389	581	240
in	start. again after being lost	1	0	1	2
put	transferred in this period	27	70	97	41
c	Total= (a)+(b)	387	801	1188	551
	completing treat. this period	143	245	388	179
out	died during this period	17	19	36	8
put	transferred out this period	49	90	139	80
	lost during this period	62	116	178	100
	Nº of cases stopped this per.	**********	83	**********	13
	Nº of cases Repatriated	23	28	51	25
d	TOTAL	294	581	875	405
e	Under treatment at the end of the period: (c)-(d)	93	220	313	146
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total n° of TB patients on treatment at the end of per. :			459	

	1992	1991
No of sputa examined / patient:	2.83	
ratio new AFB(+)reg/new pulm.pat:	33.05%	
AFB(+) lost/(output - transf. out):	27.93%	
AFB(-) Lost/(output - transf. out):	30.53%	

REPORT

District/Agency : ALL VOLAGS

BHU:	ALL BHUs		No of reports 1011
PERIOD : from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	53818	2464	20970	1116
Under Treatment (old patients)	13890	2329	7305	974
TOTAL	67738	4793	28275	2090

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ************		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a	On treat. end previous per.	900	1074	1974	1084
b	new cases reg. this period	1271	1119	2390	1489
in	start. again after being lost	22	13	35	18
put	transferred in this period	35	179	214	127
c	Total= (a)+(b)	2228	2385	4613	2718
	completing treat. this period	983	998	1981	979
out	died during this period	22	20	42	4
put	transferred out this period	133	162	295	217
	lost during this period	363	349	712	467
Nº of cases stopped this per.		**********	36	**********	0
	Nº of cases Repatriated	67	114	181	134
d	T O T A L	1568	1679	3247	1801
e	Under treatment at the end of the period: (c)-(d)	660	706	1366	917
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total nº of TB patients on treatment at the end of per. :				2283	

	1992	1991
No of sputa examined / patient:	2.40	
ratio new AFB(+)reg/new pulm.pat:	53.18%	
AFB(+) lost/(output - transf. out):	26.54%	
AFB(-) Lost/(output - transf. out):	25.53%	

REPORT

District/Agency : PESHAWAR

BHU: ALL BHUs		No of reports 547
PERIOD: from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	38836	1558	15650	784
Under Treatment (old patients)	9031	1761	5543	760
TOTAL	47867	3319	21193	1544

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	599	598	1197	786
b	new cases reg. this period	945	669	1614	1126
in	start. again after being lost	21	13	34	17
put	transferred in this period	26	147	173	110
c	Total= (a)+(b)	1591	1427	3018	2039
	completing treat. this period	731	683	1414	783
out	died during this period	8	3	11	0
put	transferred out this period	112	107	219	189
	lost during this period	222	180	402	314
Nº of cases stopped this per.		**********	0	**********	0
	Nº of cases Repatriated	49	61	110	91
d	TOTAL	1122	1034	2156	1377
e	Under treatment at the end of the period: (c)-(d)	469	393	862	662
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total nº of TB patients on treatment at the end of per. :				1524	

	1992	1991
No of sputa examined / patient:	2.26	
ratio new AFB(+)reg/new pulm.pat:	58.55%	
AFB(+) lost/(output - transf. out):	23.10%	
AFB(-) Lost/(output - transf. out):	20.79%	

REPORT

District/Agency : MARDAN

BHU :	ALL BHUs	No of reports	162
PERIOD : from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

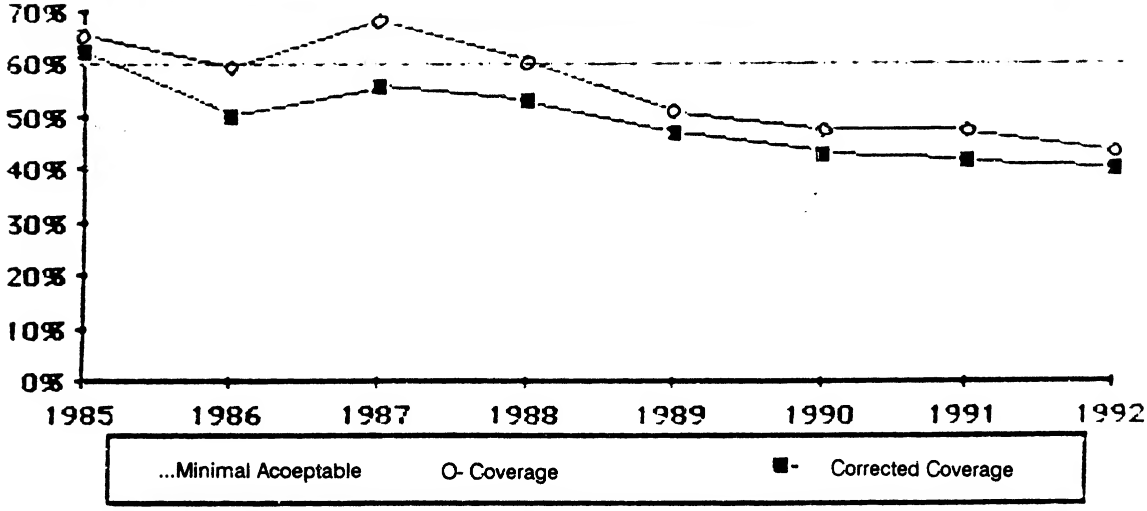
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	4043	103	1339	37
Under Treatment (old patients)	373	58	124	21
TOTAL	4416	161	1463	58

B. TREATMENT ACTIVITIES

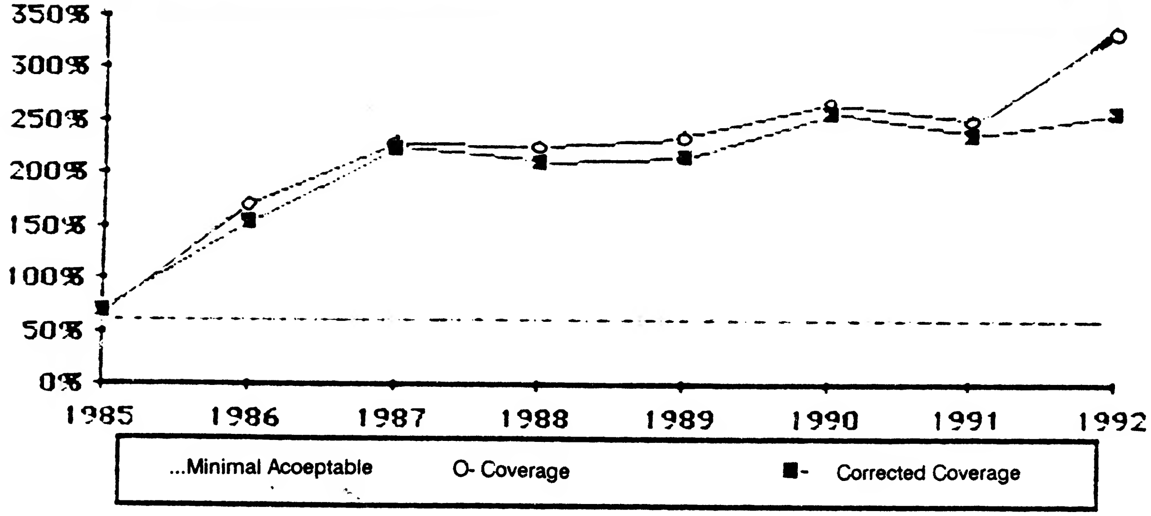
	**********/ TYPE OF DISEASE CASES/ ***********	Nº of PULMONARY CASES			Nº Extra-P cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	30	36	66	39
b	new cases reg. this period	37	33	70	36
in	start. again after being lost	0	0	0	0
put	transferred in this period	3	17	20	6
c	Total= (a)+(b)	70	86	156	81
	completing treat. this period	25	28	53	34
out	died during this period	7	1	8	3
put	transferred out this period	10	18	28	11
	lost during this period	12	15	27	11
	Nº of cases stopped this per.	++++++++++	2	++++++++++	0
	Nº of cases Repatriated	6	8	14	1
d	TOTAL	60	72	132	60
e	Under treatment at the end of the period: (c)-(d)	10	14	24	21
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	++++++++++	++++++++++
	Total nº of TB patients on treatment at the end of per.			45	

	1992	1991
No of sputa examined / patient:	3.02	
ratio new AFB(+)reg/new pulm.pat:	452.86%	
AFB(+) lost/(output - transf. out):	27.27%	
AFB(-) Lost/(output - transf. out):	34.09%	

MARDAN DISTRICT
Case Finding Coverage % of Expected Incidence



PESHAWAR DISTRICT
Case Finding Coverage % of Expected Incidence



REPORT

District/Agency : HARIPUR

BHU : ALL BHUs		No of reports 96
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	2908	128	1018	53
Under Treatment (old patients)	554	45	188	19
TOTAL	3462	173	1206	72

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a	On treat. end previous per.	33	65	98	51
b	new cases reg. this period	54	52	106	45
in	start. again after being lost	0	0	0	0
put	transferred in this period	1	2	3	4
c	Total= (a)+(b)	88	119	207	100
out	completing treat. this period	41	54	95	42
	died during this period	2	2	4	2
put	transferred out this period	3	2	5	3
	lost during this period	2	7	9	6
Nº of cases stopped this per.		**********	0	**********	0
	Nº of cases Repatriated	12	15	27	12
d	T O T A L	60	80	140	65
e	Under treatment at the end of the period: (c)-(d)	28	39	67	35
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total n° of TB patients on treatment at the end of per. :				102	

	1992	1991
No of sputa examined / patient:	2.87	
ratio new AFB(+)reg/new pulm.pat:	50.94%	
AFB(+) lost/(output - transf. out):	4.44%	
AFB(-) Lost/(output - transf. out):	11.11%	

REPORT

District/Agency : GHAZI

BHU :	ALL BHUs	No of reports	24
PERIOD : from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	1321	27	441	9
Under Treatment (old patients)	132	0	44	0
TOTAL	1453	27	485	9

B. TREATMENT ACTIVITIES

	**********/ TYPE OF DISEASE CASES/ ***********	Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	7	12	19	3
b	new cases reg. this period	9	5	14	3
in	start. again after being lost	0	0	0	0
put	transferred in this period	0	1	1	0
c	Total= (a)+(b)	16	18	34	6
	completing treat. this period	7	12	19	1
out	died during this period	1	0	1	0
put	transferred out this period	1	0	1	0
	lost during this period	0	1	1	2
	Nº of cases stopped this per.	**********	0	**********	0
	Nº of cases Repatriated	2	1	3	0
d	TOTAL	11	14	25	3
e	Under treatment at the end of the period: (c)-(d)	5	4	9	3
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total nº of TB patients on treatment at the end of per. :			12	

	1992	1991
No of sputa examined / patient:	3.00	
ratio new AFB(+)reg/new pulm.pat:	64.29%	
AFB(+) lost/(output - transf out):	0.00%	
AFB(-) Lost/(output - transf. out):	7.69%	

REPORT

District/Agency : MANSEHRA

BHU: ALL BHUs		No of reports 84
PERIOD: from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

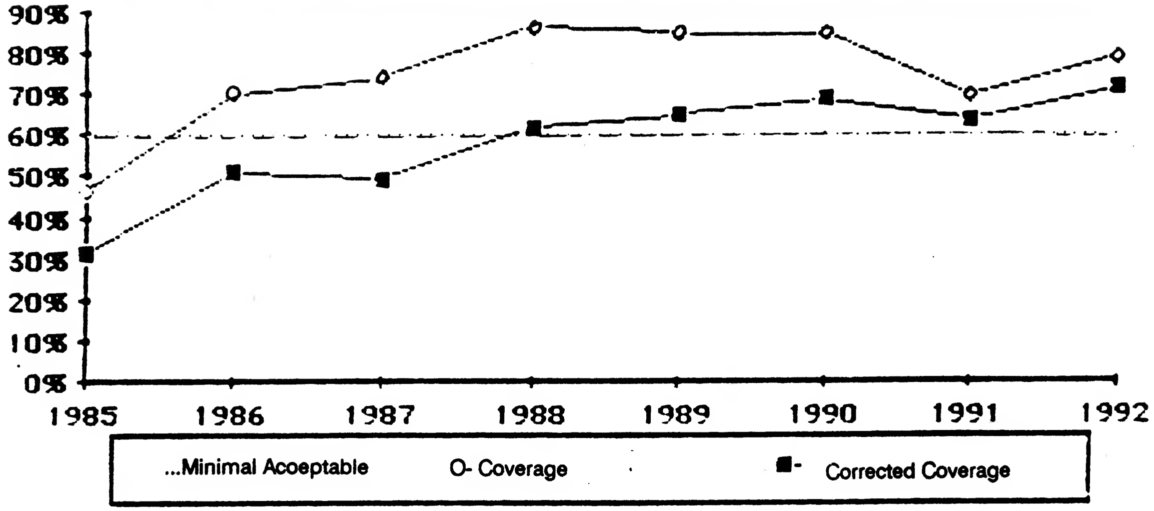
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	1200	120	400	40
Under Treatment (old patients)	741	64	247	22
TOTAL	1941	184	647	62

B. TREATMENT ACTIVITIES

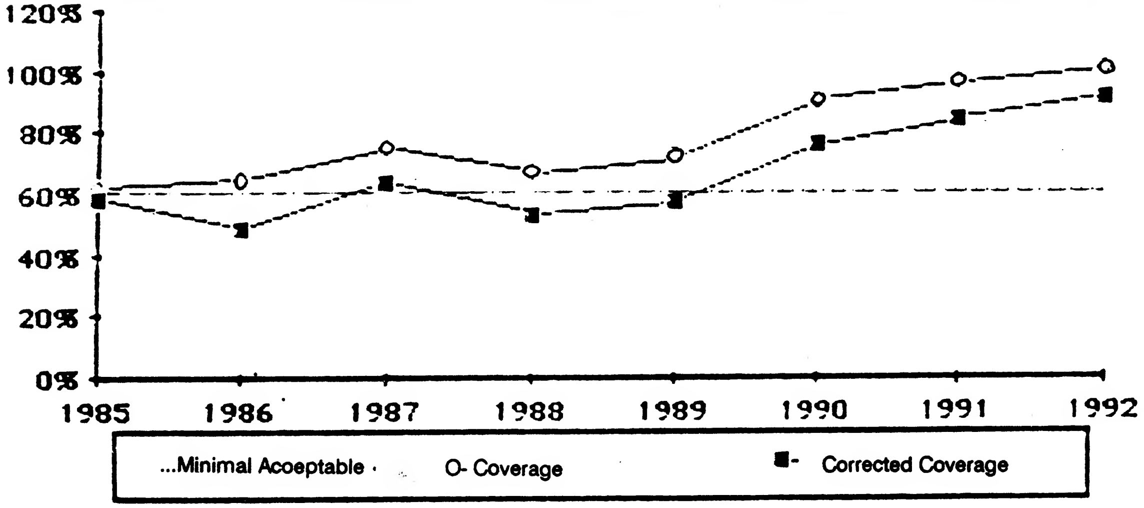
*********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a	On treat. end previous per.	41	54	95	45
b	new cases reg. this period	43	101	144	44
in	start. again after being lost	0	0	0	1
put	transferred in this period	2	6	8	0
c	Total= (a)+(b)	86	161	247	90
	completing treat. this period	54	54	108	38
out	died during this period	3	4	7	2
put	transferred out this period	1	9	10	4
	lost during this period	2	5	7	4
	Nº of cases stopped this per.	**********	11	**********	0
	Nº of cases Repatriated	5	13	18	5
d	T O T A L	65	96	161	51
e	Under treatment at the end of the period: (c)-(d)	21	65	86	39
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total nº of TB patients on treatment at the end of per. :			125	

	1992	1991
No of sputa examined / patient:	3.00	
ratio new AFB(+)reg/new pulm.pat:	29.86%	
AFB(+) lost/(output - transf. out):	3.39%	
AFB(-) Lost/(output - transf. out):	7.94%	

HARIPUR DISTRICT
Case Finding Coverage % of Expected Incidence



MANSEHRA DISTRICT
Case Finding Coverage % of Expected Incidence



REPORT

District/Agency : DIR

BHU:	ALL BHUs		No of reports 84
PERIOD: from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	383	24	136	8
Under Treatment (old patients)	124	15	47	5
TOTAL	507	39	183	13

B. TREATMENT ACTIVITIES

*********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	15	31	46	24
b	new cases reg. this period	13	23	36	12
in	start. again after being lost	0	0	0	0
put	transferred in this period	3	2	5	2
c	Total= (a)+(b)	31	56	87	38
	completing treat. this period	14	25	39	15
out	died during this period	3	1	4	0
put	transferred out this period	1	3	4	1
	lost during this period	6	4	10	5
Nº of cases stopped this per.		**********	8	**********	3
	Nº of cases Repatriated	1	1	2	6
d	TOTAL	25	42	67	30
e	Under treatment at the end of the period; (c)-(d)	6	14	20	8
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total nº of TB patients on treatment at the end of per. :				28	

	1992	1991
No of sputa examined / patient:	2.77	
ratio new AFB(+)reg/new pulm.pat:	36.11%	
AFB(+) lost/(output - transf. out):	26.09%	
AFB(-) Lost/(output - transf. out):	13.33%	

REPORT

District/Agency: BAJAUR

CHU: ALL BHUs		No of reports	183
PERIOD: from 01-92	to : 12-92		

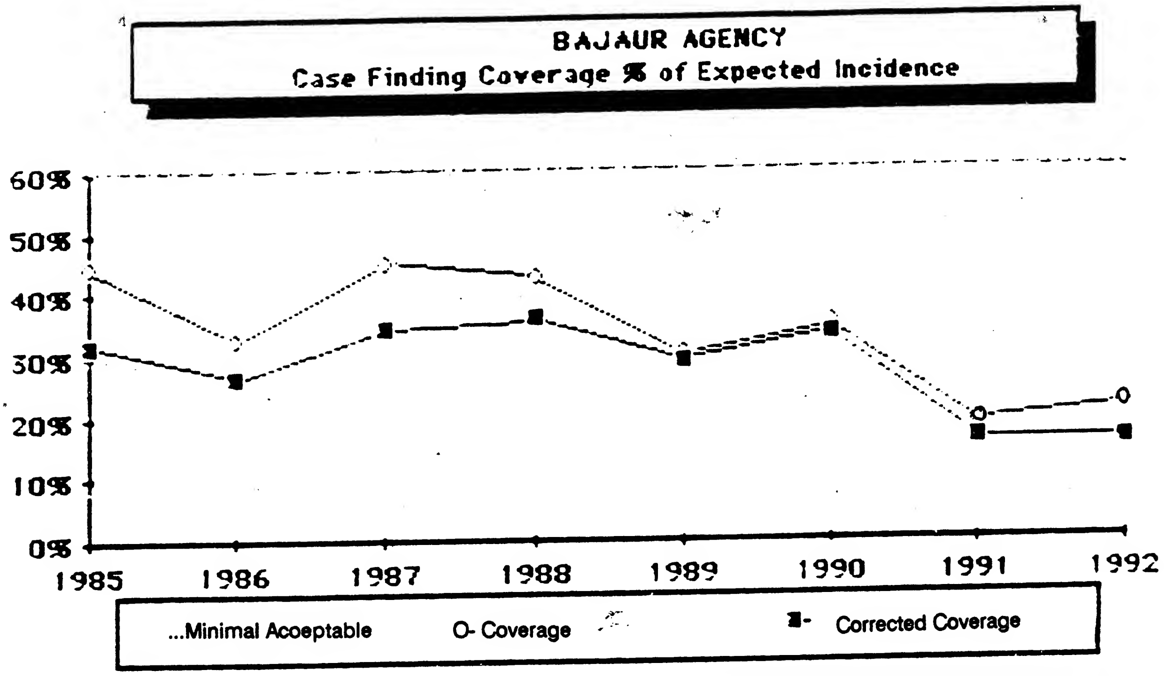
A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

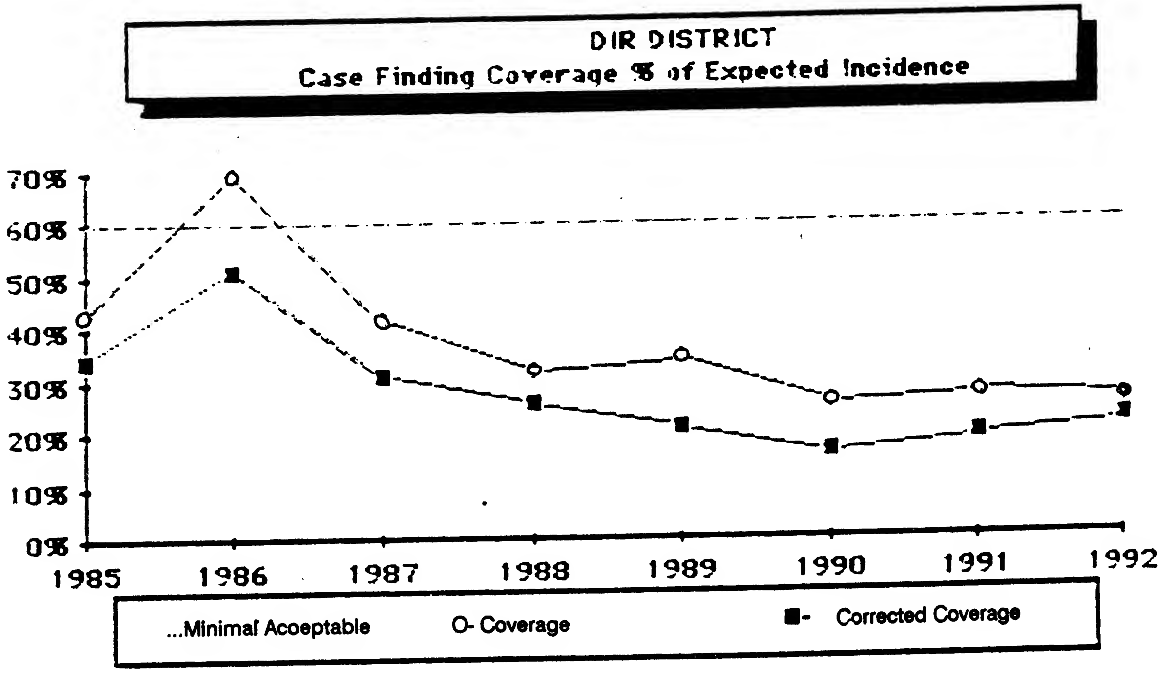
Type of patients/ ******	Nº of slides examined	Nº of slides. found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	1365	63	454	21
Under Treatment (old patients)	338	35	114	12
TOTAL	1703	98	568	33

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a	On treat. end previous per.	18	57	75	66
b	new cases reg. this period	23	80	103	60
in	start. again after being lost	0	0	0	0
put	transferred in this period	3	7	10	9
c	Total= (a)+(b)	44	144	188	135
	completing treat. this period	19	52	71	51
out	died during this period	1	4	5	3
put	transferred out this period	10	24	34	37
	lost during this period	6	6	12	18
	Nº of cases stopped this per.	**********	33	**********	3
	Nº of cases Repatriated	0	2	2	1
d	TOTAL	36	121	157	113
e	Under treatment at the end of the period: (c)-(d)	8	23	31	22
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total n° of TB patients on treatment at the end of per.:			53	

	1992	1991
No of sputa examined / patient:	3.00	
ratio new AFB(+)reg/new pulm.pat:	22.33%	
AFB(+) lost/(output - transf. out):	23.08%	
AFB(-) Lost/(output - transf. out):	9.68%	


BAJAUR AGENCY
Case Finding Coverage % of Expected Incidence


DIR DISTRICT
Case Finding Coverage % of Expected Incidence

REPORT

District/Agency : CHITRAL

BHU : ALL BHUs		No of reports 82
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	396	57	164	18
Under Treatment (old patients)	86	4	35	3
TOTAL	482	61	199	21

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	16	27	43	27
b	new cases reg. this period	25	34	59	41
in	start. again after being lost	0	0	0	1
put	transferred in this period	3	7	10	9
c	Total= (a)+(b)	44	68	112	78
	completing treat. this period	17	18	35	19
out	died during this period	1	3	4	1
put	transferred out this period	3	10	13	8
	lost during this period	6	11	17	14
Nº of cases stopped this per.		**********	0	**********	0
	Nº of cases Repatriated	7	18	25	25
d	TOTAL	34	60	94	67
e	Under treatment at the end of the period: (c)-(d)	10	8	18	11
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total nº of TB patients on treatment at the end of per. :				29	

	1992	1991
No of sputa examined / patient:	2.42	
ratio new AFB(+)reg/new pulm.pat:	42.37%	
AFB(+) lost/(output - transf. out):	25.00%	
AFB(-) Lost/(output - transf. out):	34.38%	

REPORT

District/Agency : KOHAT

BHU : ALL BHUs		No of reports 231
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

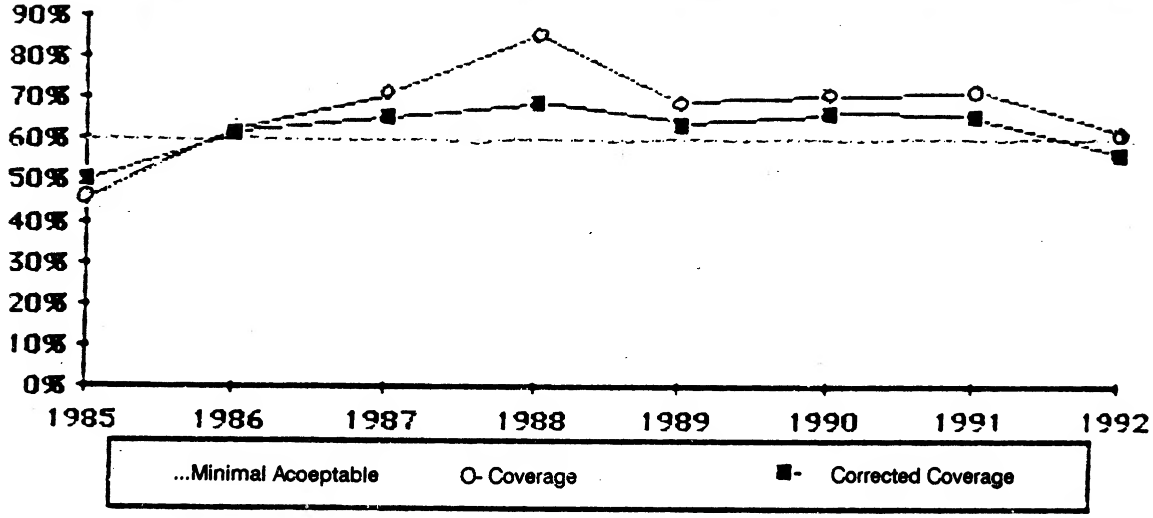
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	4561	289	1651	105
Under Treatment (old patients)	1658	80	593	32
TOTAL	6219	369	2244	137

B. TREATMENT ACTIVITIES

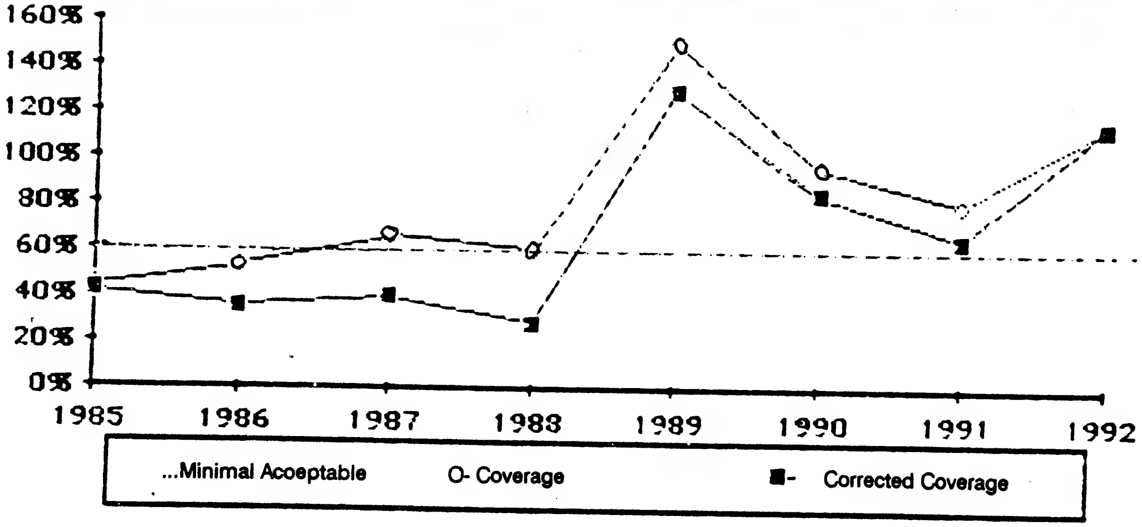
*********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	92	222	314	145
b	new cases reg. this period	89	214	303	113
in	start. again after being lost	1	0	1	0
put	transferred in this period	0	6	6	2
c	Total= (a)+(b)	182	442	624	260
	completing treat. this period	90	163	253	110
out	died during this period	5	14	19	0
put	transferred out this period	1	4	5	2
	lost during this period	15	68	83	42
Nº of cases stopped this per.		**********	4	**********	0
	Nº of cases Repatriated	1	8	9	4
d	TOTAL	112	261	373	158
e	Under treatment at the end of the period: (c)-(d)	70	181	251	102
Nº of months defaulted this per		NA	NA	NA	NA
Nº of sputum (-)ve becoming (+)ve this per.		0		**********	**********
Total nº of TB patients on treatment at the end of per. :				353	

	1992	1991
No of sputa examined / patient:	2.77	
ratio new AFB(+)reg/new pulm.pat:	29.37%	
AFB(+) lost/(output - transf. out):	13.64%	
AFB(-) Lost/(output - transf. out):	27.76%	

KOHAT DISTRICT
Case Finding Coverage % of Expected Incidence



CHITRAL DISTRICT
Case Finding Coverage % of Expected Incidence



REPORT

District/Agency : KURRAM

BHU : ALL BHUs		No of reports 286
PERIOD : from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	3024	290	1059	105
Under Treatment (old patients)	1548	221	578	83
TOTAL	4572	511	1637	188

B. TREATMENT ACTIVITIES

	**********/ TYPE OF DISEASE CASES/ ***********	Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a.	On treat. end previous per.	89	145	234	90
b	new cases reg. this period	111	144	255	158
in	start. again after being lost	0	0	0	0
put	transferred in this period	9	20	29	9
c	Total= (a)+(b)	209	309	518	257
out	completing treat. this period	76	86	162	46
put	died during this period	6	3	9	0
	transferred out this period	17	28	45	14
	lost during this period	52	64	116	81
	Nº of cases stopped this per.	**********	25	**********	4
	Nº of cases Repatriated	4	12	16	9
d	T O T A L	155	218	373	154
e	Under treatment at the end of the period: (c)-(d)	54	91	145	103
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total nº of TB patients on treatment at the end of per. :			248	

	1992	1991
No of sputa examined / patient:	2.79	
ratio new AFB(+)reg/new pulm.pat:	43.53%	
AFB(+) lost/(output - transf. out):	38.81%	
AFB(-) Lost/(output - transf. out):	41.83%	

REPORT

District/Agency: BANNU

BHU:	ALL BHUs	No of reports	53
PERIOD: from	01-92	to :	12-92

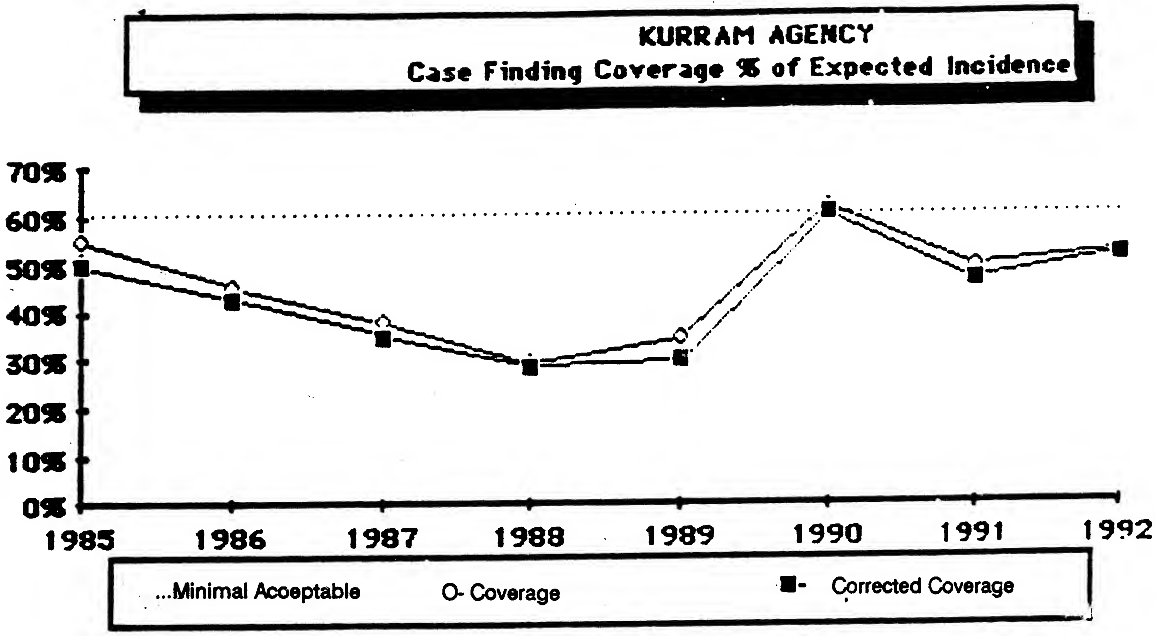
A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	400	21	140	7
Under Treatment (old patients)	57	9	19	3
TOTAL	457	30	159	10

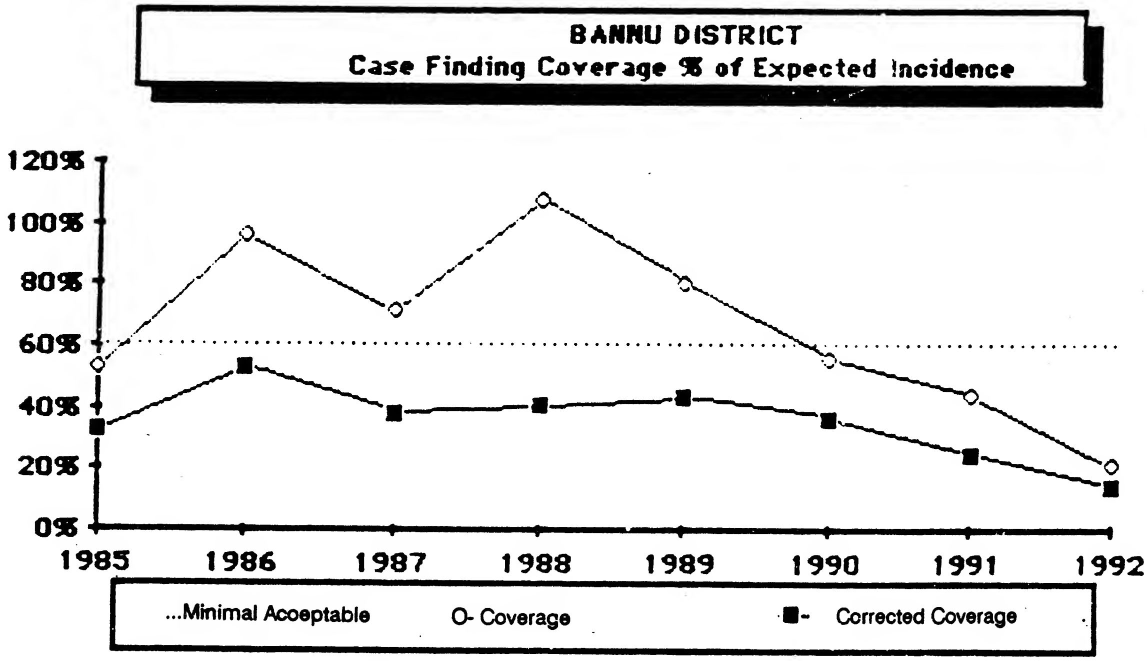
B. TREATMENT ACTIVITIES

	**********/ TYPE OF DISEASE CASES/ ***********	Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	13	22	35	10
b	new cases reg. this period	9	30	39	9
in	start. again after being lost	0	0	0	0
put	transferred in this period	3	6	9	2
c	Total= (a)+(b)	25	58	83	21
	completing treat. this period	5	4	9	3
out	died during this period	0	0	0	0
put	transferred out this period	9	24	33	8
	lost during this period	6	14	20	5
	Nº of cases stopped this per.	**********	4	**********	0
	Nº of cases Repatriated	2	2	4	2
d	TOTAL	22	48	70	18
e	Under treatment at the end of the period: (c)-(d)	3	10	13	3
	Nº of months defaulted this per	N A	N A	N A	N A
	Nº of sputum (-)ve becoming (+)ve this per.		0	**********	**********
	Total nº of TB patients on treatment at the end of per.:			16	

	1992	1991
No of sputa examined / patient:	2.87	
ratio new AFB(+)reg/new pulm.pat:	23.08%	
AFB(+) lost/(output - transf. out):	54.55%	
AFB(-) Lost/(output - transf. out):	77.78%	



KURRAM AGENCY
Case Finding Coverage % of Expected Incidence



BANNU DISTRICT
Case Finding Coverage % of Expected Incidence

REPORT

District/Agency :	N.WASIRISTAN		
BHU :	ALL BHUs		No of reports 161
PERIOD : from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	3876	164	1487	55
Under Treatment (old patients)	1147	146	404	50
TOTAL	5023	310	1891	105

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	66	114	180	52
b	new cases reg. this period	61	70	131	49
in	start. again after being lost	0	0	0	0
put	transferred in this period	6	16	22	7
c	Total= (a)+(b)	133	200	333	108
	completing treat. this period	30	52	82	14
out	died during this period	0	2	2	1
put	transferred out this period	1	7	8	3
	lost during this period	63	71	134	52
Nº of cases stopped this per.		**********	20	**********	3
	Nº of cases Repatriated	0	0	0	4
d	TOTAL	94	152	246	77
e	Under treatment at the end of the period: (c)-(d)	39	48	87	31
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total nº of TB patients on treatment at the end of per. :				118	

	1992	1991
No of sputa examined / patient:	23.66	
ratio new AFB(+)reg/new pulm.pat:	46.56%	
AFB(+) lost/(output - transf. out):	67.74%	
AFB(-) Lost/(output - transf. out):	56.80%	

REPORT

District/Agency : S.WASIRISTAN

BHU:	ALL BHUs		No of reports 60
PERIOD: from	01-92	to :	12-92

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

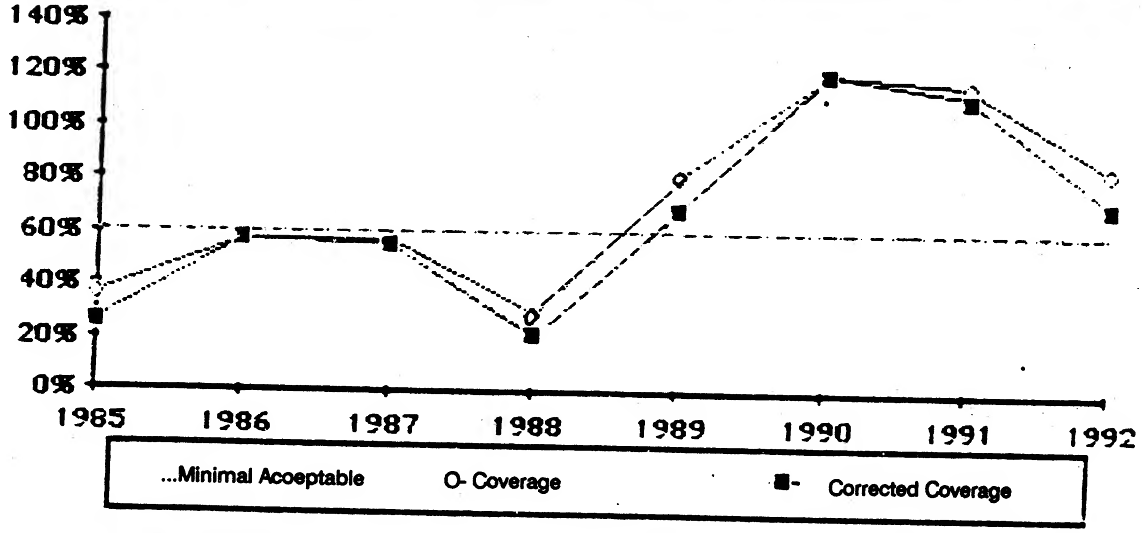
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	1028	75	408	35
Under Treatment (old patients)	250	35	102	17
TOTAL	1278	110	510	52

B. TREATMENT ACTIVITIES

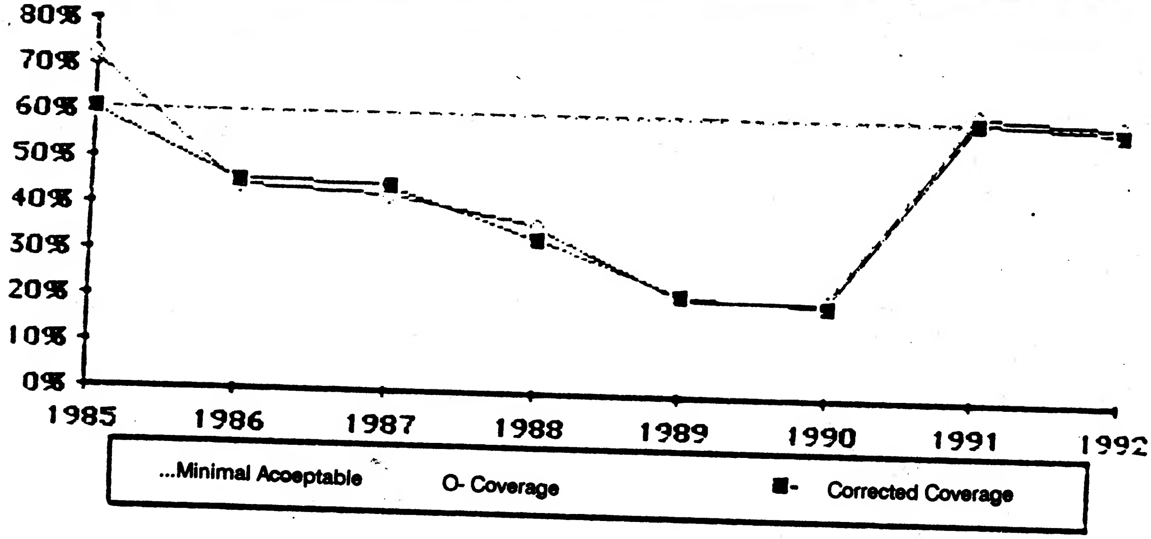
**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	Total	
a	On treat. end previous per.	39	19	58	12
b	new cases reg. this period	31	31	62	26
in	start. again after being lost	1	0	1	0
put	transferred in this period	3	4	7	8
c	Total= (a)+(b)	74	54	128	46
	completing treat. this period	15	10	25	2
out	died during this period	1	2	3	0
put	transferred out this period	1	4	5	10
	lost during this period	31	14	45	12
Nº of cases stopped this per.		**********	2	**********	0
	Nº of cases Repatriated	1	1	2	1
d	TOTAL	49	33	82	25
e	Under treatment at the end of the period: (c)-(d)	25	21	46	21
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total n° of TB patients on treatment at the end of per. :				67	

	1992	1991
No of sputa examined / patient:	2.51	
ratio new AFB(+)reg/new pulm.pat:	50.00%	
AFB(+) lost/(output - transf. out):	65.96%	
AFB(-) Lost/(output - transf. out):	53.85%	

SOUTH WASIRISTAN
Case Finding Coverage % of Expected Incidence



NORTH WASIRISTAN
Case Finding Coverage % of Expected Incidence



REPORT

District/Agency : D.I.KHAN

BHU: ALL BHUs		No of reports 94
PERIOD: from 01-92	to : 12-92	

A. CASE FINDING ACTIVITIES BY MICROSCOPIC EXAMINATION

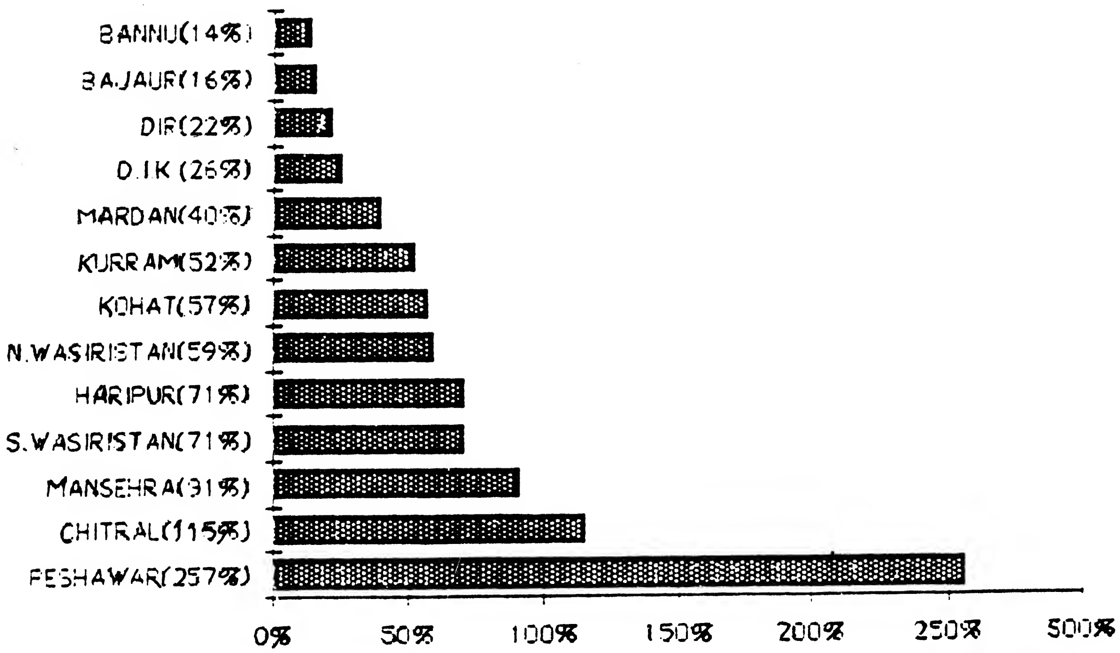
Type of patients/ ******	Nº of slides examined	Nº of slides found (+) ve	Nº of patien. examined	Nº of patien. found (+) ve
New attendants of the clinic	192	22	77	12
Under Treatment (old patients)	24	8	10	4
TOTAL	216	30	87	16

B. TREATMENT ACTIVITIES

**********/ TYPE OF DISEASE CASES/ ***********		Nº of PULMONARY CASES			Nº Extra-P. cases
		Smear (+)ve	Smear (-)ve	T o t a l	
a	On treat. end previous per.	9	14	23	2
b	new cases reg. this period	13	22	35	7
in	start. again after being lost	0	0	0	1
put	transferred in this period	0	8	8	0
c	Total= (a)+(b)	22	44	66	10
	completing treat. this period	2	2	4	0
out	died during this period	1	0	1	0
put	transferred out this period	12	12	24	7
	lost during this period	2	5	7	1
Nº of cases stopped this per.		**********	10	**********	0
	Nº of cases Repatriated	0	0	0	0
d	T O T A L	17	29	46	8
e	Under treatment at the end of the period: (c)-(d)	5	15	20	2
Nº of months defaulted this per		N A	N A	N A	N A
Nº of sputum (-)ve becoming (+)ve this per.			0	**********	**********
Total n° of TB patients on treatment at the end of per. :				22	

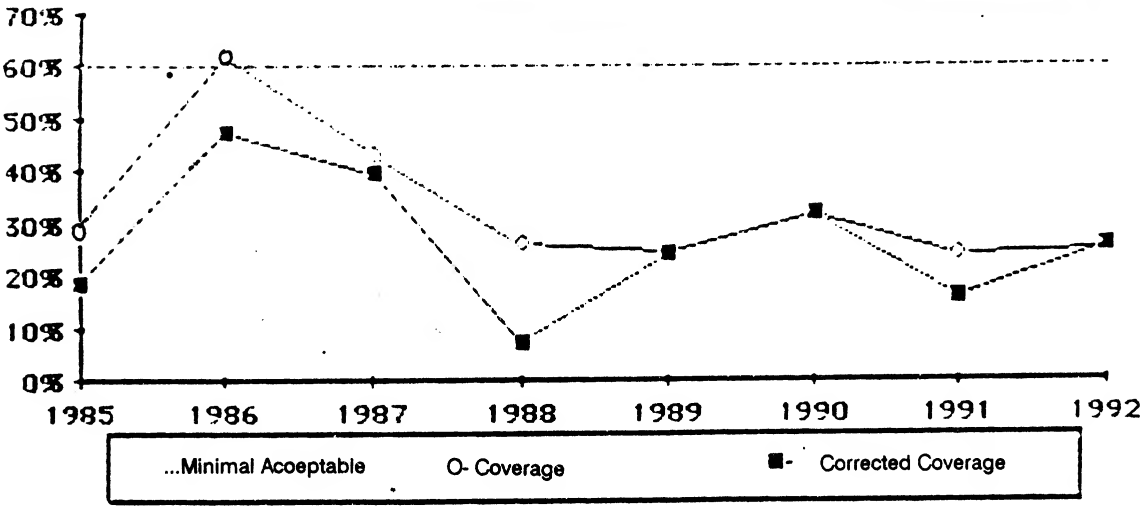
	1992	1991
No of sputa examined / patient:	2.48	
ratio new AFB(+)reg/new pulm.pat:	37.14%	
AFB(+) lost/(output - transf. out):	40.00%	
AFB(-) Lost/(output - transf. out):	71.43%	

N.W.F.P. 1992 Case Finding Coverage % by Distruct



D.I.KHAN DISTRICT

Case Finding Coverage % of Expected Incidence



AFB + 1991 ANALYSIS

A study on sputum positive patients diagnosed during 1991 was carried out (regarding 1992 we don't have yet complete data, because many patients are still under treatment).

In similar studies done in the previous years on the patients diagnosed from 1985 to 1990, looking at the general outcome we found a constant increase of the cured patients (at least two sputum negative sputa before completing the treatment are required for being labelled as cured), but there has always been a significant unsuccess rate (unsuccess= lost + transferred out + failure + died).
Such a unsuccess rate was always about 30% and never implied any significant increase of the failures or of the deaths, neither implied any loss of efficacy of the treatment regimens. Rather the number of patients labelled as lost or transferred out was high, whether because of a poor compliance or because of difficulties to a proper registration and data collection (migrations, increasing trend to attend hospitals for diagnostic facilities with consequent transfers to singles BHU's for treatment and follow up, etc.). Therefore the tracing of the defaulters has always been considered one of the most important targets of our programme.

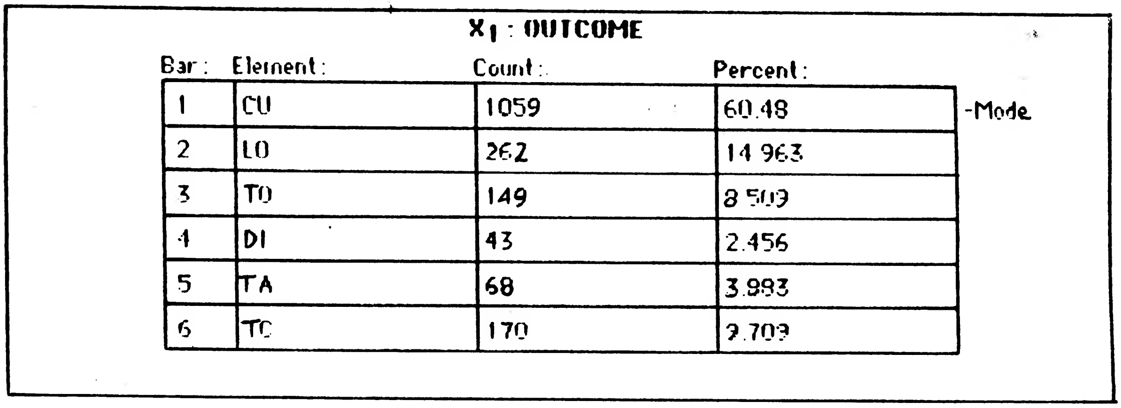
In **1991** the **success rate** was **70.2%**, but again the wide majority of the unsuccessful patients were the lost and the transferred out (15% and 8.5% respectively).
Comparing such figures with 1990 the success rate has slightly increased (69.34% in 1990), the lost patients dropped from 17.20% but still represent 50% of the total unsuccessful cases, while the transferred out increased (6.6% in 1990).
The repatration of the refugees probably affected such figures too.
No AFB+ patients put under treatment in 1991 were recorded as repatriated, but some of the lost and the T.O. could have left to Afghanistan without informing the BHU staff.
Moreover the decreased efficiency we saw in some BHUs after the repatration weakened the follow up of the patients already under treatment. In fact for the first time the cured patients decreased from the previous year (60.48 in '91 and 62.74 in '90) while the "treatment completed" increased (9.7 in '91 and 6.6 in '90).

The highest averages of lost patients were reached by the agencies whose activities were mainly performed in hospitals (i.g. I.I.R.O., AHSAO, Lej. ul Dawa), and this confirms what previously suggested, that the trend to a

larger confidence in the hospitals results in a higher average of defaulters and "lost".
However, while some agencies (CHREP, SC(US)) and FSMOs (Haripur, Kohat) working only in refugees camps kept a very low rate of "lost" and some improved (IRC with 9.6 in 91 versus 13.5 in 90), some other increased significantly their rates as a sign of a general reduction of all performances (UNHCR as a whole with 17 in 91 versus 12.6 in 90, UAAR with 15.3 in 91 versus 10.6 in 90).
As SRCS is concerned the figures show a general improvement, due to a decrease of the lost and of the failure patients and subsequently with an increase of the success rate.
Such improvement is mainly due to the fact that, since SRCS prescribes Rifampicine in the maintenance phase too and such a regimen is internationally recommended for six months instead than for eight, we decided to consider a patient treatment completed or cured after six months of therapy and not after eight months as for all other agencies. Thus patients that were labelled as lost or T.O. after the sixth month in the previous years were now considered treatment completed or cured according to the number of negative sputa.

The **failure rate** (**3.88%**) decreased compared with 1990 (4.32%).
We remind that such figure assesses the failure rate of the programme and not of the short course. That means that the cases who failed the short course but then responded to the retreatment regimen (introduced in 1990) were considered as successful.
While many of the 1990 patients who were given the retreatment regimen were very chronic ones and therefore with little chances of success, those of 1991 had such retreatment immediatly after the failure of the short course and so with better results.
This particularly fits to SRCS, whose chronic patients had Rifampicine for long periods and thus had even lower chances of success, and may explain why SRCS had the best improvement of the failure rate (a study on the patients treated with the retreatment regimen will be discussed later on).
The 1991 failure rates are quite different than the 1990 ones.
The failure rates of most agencies increased, and the drop of the general failure rate looks mainly due to the improvement of SRCS figures.
The reason of it may be either the weak follow up in many BHUs we already discussed or the decreased total number of patients of most agencies which decreases accordingly the reliability of statistics (one single patient represent 2% if the total patients are only 50).
Anyhow the crude figures of the failure rates by agency, contrary to those of the previous years, suggest a better result with a six months short course with Rifampicine in the maintenance phase than with the eight months short course with INH+T in the maintenance phase.

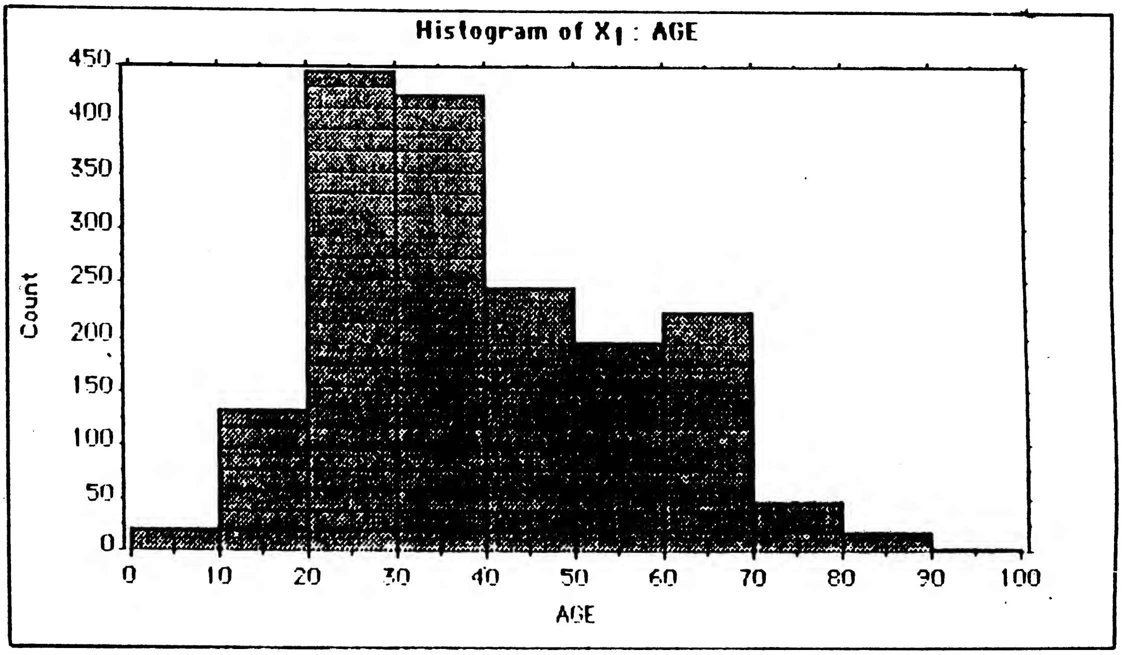
TBCP-GENERAL OUTCOME FOR YEAR91(ALL POSITIVE PATIENTS)



X_1 : OUTCOME

Bar :	Element :	Count :	Percent :	
1	CU	1059	60.48	-Mode
2	LO	262	14.963	
3	TO	149	8.509	
4	DI	43	2.456	
5	TA	68	3.883	
6	TC	170	9.709	

TBCP-AGE DISTRIBUTION FOR YEAR 91 (ALL POSITIVE PATIENTS)



TBCP-SUCCESS RATE FOR YEAR 91(ALL POSITIVE PATIENTS)

X_1 : SUCCESS

Bar:	Element:	Count:	Percent:	
1	YES	1229	70.188	-Mode
2	NO	522	29.812	

TBCP-SUCCESS RATE FOR YEAR 91(NEW POSITIVE PATIENTS)

X_1 : SUCCESS

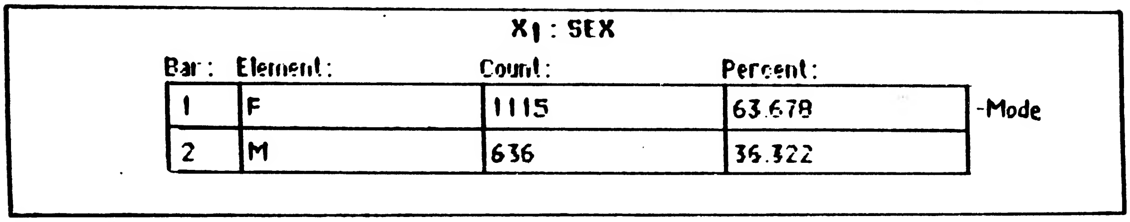
Bar:	Element:	Count:	Percent:	
1	YES	1168	70.831	-Mode
2	NO	481	29.169	

TBCP-SUCCESS RATE FOR YEAR 91(RELAPSE POSITIVE PATIENTS)

X_1 : SUCCESS

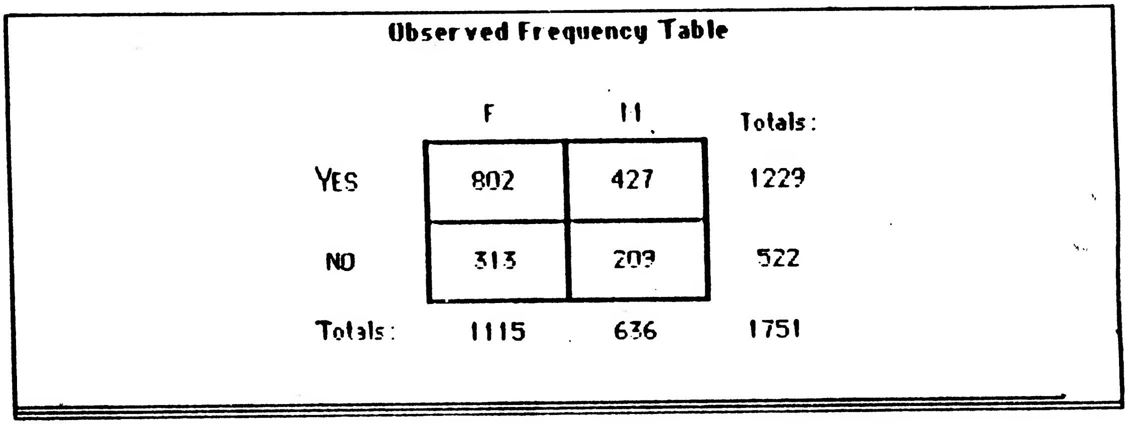
Bar:	Element:	Count:	Percent:	
1	YES	37	58.73	-Mode
2	NO	26	41.27	

TBCP-SEX DISTRIBUTION FOR YEAR 91 (ALL POSITIVE PATIENTS)



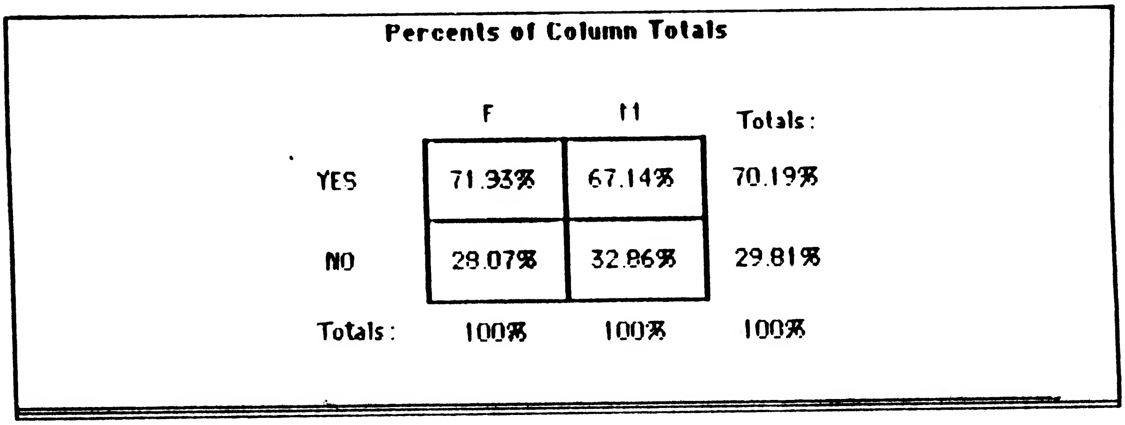
X1 : SEX

Bar:	Element:	Count:	Percent:	
1	F	1115	63.678	-Mode
2	M	636	36.322	



Observed Frequency Table

	F	M	Totals:
YES	802	427	1229
NO	313	209	522
Totals:	1115	636	1751



Percents of Column Totals

	F	M	Totals:
YES	71.93%	67.14%	70.19%
NO	28.07%	32.86%	29.81%
Totals:	100%	100%	100%

OUTCOME BY AGENCY FOR YEAR 1991 (AFB POSITIVE PATIENTS)

(only agencies with minimum 20 pts were considered)

	Lost	%	Treatm.Com.	%	Cured	%	Failure	%	Died	%	Trans. out	%	Totals
UNHCR	47	17.0%	50	18.1%	126	45.5%	12	4.3%	16	5.8%	26	9.4%	277
AHSAO	10	27.0%	17	45.9%	7	18.9%	3	8.1%	0	0.0%	0	0.0%	37
CHREP	1	1.9%	2	3.8%	41	78.8%	3	5.8%	2	3.8%	3	5.8%	52
IRC	11	9.6%	13	11.3%	75	65.2%	8	7.0%	6	5.2%	2	1.7%	115
IIRO	21	42.9%	25	51.0%	2	4.1%	1	2.0%	0	0.0%	0	0.0%	49
SC(US)	1	3.1%	1	3.1%	23	71.9%	1	3.1%	3	9.4%	3	9.4%	32
SRCS	107	11.9%	23	2.5%	642	71.2%	21	2.3%	6	0.7%	103	11.4%	902
J.-UL-DAWA	46	36.2%	15	11.8%	50	39.4%	8	6.3%	3	2.4%	5	3.9%	127
UAAR	13	15.3%	10	11.8%	47	55.3%	5	5.9%	6	7.1%	4	4.7%	85

SUCCESS RATE BY AGENCY FOR YEAR 1991 (AFB POSITIVE PATIENTS)

(only agencies with minimum 20 pts were considered)

	SUCCESS	%	UNSUCCESS	%	Totals
SRCS	665	73.7%	237	26.3%	902
UNHCR	176	63.5%	101	36.5%	277
IRC	88	76.5%	27	23.5%	115
UAAR	57	67.1%	28	32.9%	85
SARRO	24	75.0%	8	25.0%	32
CHREP	43	82.7%	9	17.3%	52
IIRO	27	55.1%	22	44.9%	49
LEJ.-UL-DAWA	65	51.2%	62	48.8%	127
AHSAO	24	64.9%	13	35.1%	37

SUCCESS= Treatment completed or Cured
UNSUCCESS= Lost or Died or Transfered out or Failure
(Failure= still positive after the fifth month of treatment)

RETREATMENT REGIMEN

The outcome and the success rate of 222 patients (all of them sputum positive and failure after the short course), treated with the retreatment regimen introduced in the program in August 1990, were analyzed.
The retreatment regimen is : 3-4 months of intensive phase (with S for 2 months, and RHEZ) and 5-4 months of maintenance phase (with RHE).
Out of 222 patients, 85 were previously treated by SRCS (= with Rifampicine both in the intensive and in the maintenance phase) and 137 by all other agencies (= with Rifampicine in the intensive phase only).

Looking at the general outcome we see that the **success rate** is **40%**.
12% of the patients were "lost" and 6.8% were labelled as transferred out (and then they didn't result "transferred in" in any other program facility, that means that practically they have to be considered as lost as well).
Considering that the retreatment should be a fully supervised regimen such figures are not satisfactory, because either the due attention was not paid in tracing the defaulters and in checking the patients compliance or despite such attention too many patients didn't attend regularly and properly the program facilities.
Concerning the **failure rate** (**37.8%**) we have to consider that, when the retreatment regimen was introduced in the program, out of the first patients put under retreatment many were chronic patients who already got unsuccesful therapy for long periods and who had little chances to respond to any further regimen.
In fact considering only the first 140 patients which we analyzed last year (most of the chronic patients were in this group) the failure rate was higher (41.4%), and thus there has already been a significant improvement.

If we don't consider the patients who discontinued the treatment the general success rate rises to 50%.
If we do the same assessment separately for SRCS and for all other agencies we see that the success rates are respectively 47% and 52%.
Such figures last year (when only 140 patients, including the chronic ones, completed the retreatment regimen) were 33% for SRCS and 49% for all other agencies.
It means that with a lower number of chronic patients there is no significant difference between those who had Rifampicine also in the maintenance phase and those who had Rifampicine for two months only.

A study previously carried out in our Referral Lab. on the Resistance to the TB drugs in 101 failure and relapse cases showed that, out of 46 patients resistant to all single drugs, 56.5% were still sensitive to a combination of 5 drugs (SRHET) and 34.8% were sensitive to a combination of 3 drugs (RHE). The first combination is similar to the intensive phase of the retreatment regimen (Z is replaced by T only), while the second combination is the same utilized in the maintenance phase.

The success rate "in vivo" of the patients who didn't discontinue the treatment is similar to the theoretical success suggested by the study "in vitro".

Retreetment Regimen- OUTCOME of ALL PATIENTS

X1 : Outcome

Bar :	Element :	Count :	Percent :	
1	CU	80	36.036	
2	FA	84	37.838	-Mode
3	DI	6	2.703	
4	LO	27	12.162	
5	TC	10	4.505	
6	TO	15	6.757	

Retreetment Regimen- SUCCESS RATE of ALL PATIENTS

X1 : Success

Bar :	Element :	Count :	Percent :	
1	YES	90	40.541	
2	NO	132	59.459	-Mode

UCCESS RATE of ALL PATIENTS (NOT INCLUDED PTs WHO DISCONTINUED TREATMENT)

X1 : Success

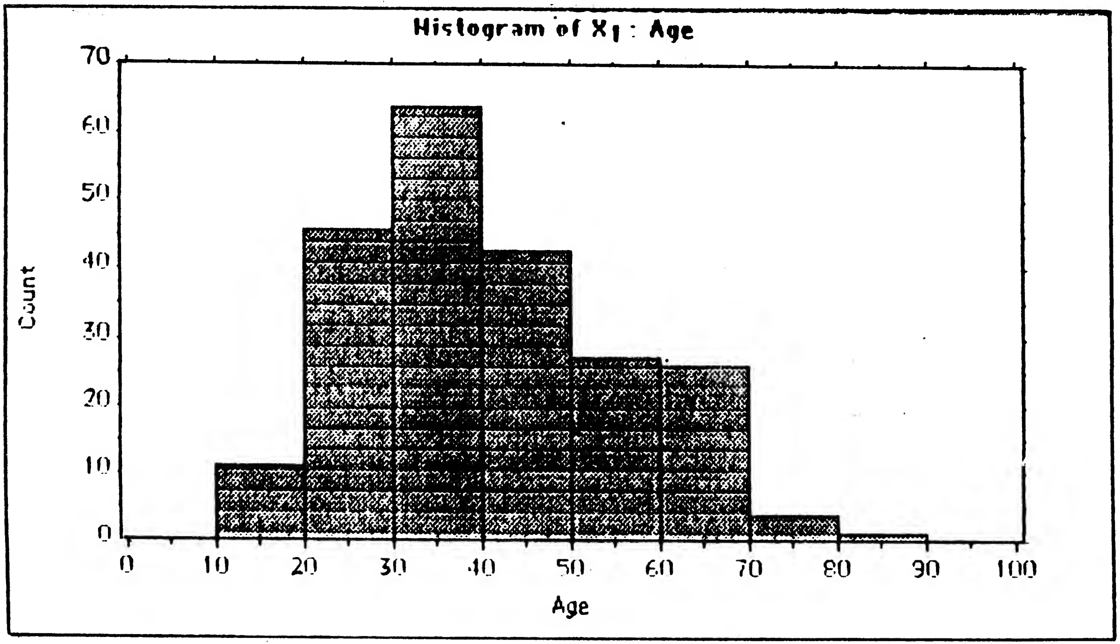
Bar :	Element :	Count :	Percent :
1	YES	90	50
2	NO	90	50

Retreatment Regimen - SEX DISTRIBUTION of ALL PATIENTS

X_1 : Sex

Bar:	Element:	Count:	Percent:	
1	M	102	45.946	
2	F	120	54.054	-Mode

Retreatment Regimen - AGE DISTRIBUTION of ALL PATIENTS



OUTCOME of SRCS ONLY

X_1 : Outcome

Bar :	Element:	Count:	Percent:	
1	CU	31	36.471	
2	FA	37	43.529	-Mode
3	DI	0	0	
4	LO	9	10.588	
5	TC	2	2.353	
6	TO	6	7.059	

SUCCESS RATE of SRCS ONLY

X_1 : Success

Bar :	Element:	Count:	Percent:	
1	YES	33	38.824	
2	NO	52	61.176	-Mode

SUCCESS RATE of SRCS ONLY (NOT INCLUDED PATIENTS WHO DISCONTINUED TREATMENT

X_1 : Success

Bar :	Element:	Count:	Percent:	
1	YES	33	47.143	
2	NO	37	52.857	-Mode

OUTCOME of ALL AGENCIES (NOT INCLUDED SRCS)

X_1 : Outcome

Bar:	Element:	Count:	Percent:	
1	CU	49	35.766	- Mode
2	FA	47	34.307	
3	DI	6	4.38	
4	LO	18	13.139	
5	TC	8	5.839	
6	TO	9	6.569	

SUCCESS RATE of ALL AGENCIES (NOT INCLUDED SRCS)

X_1 : Success

Bar:	Element:	Count:	Percent:	
1	YES	57	41.606	
2	NO	80	58.394	-Mode

SUCCESS RATE of ALL AGENCIES (NOT INCLUDED SRCS AND PTs WHO DISCONTINUED TREATMENT)

X_1 : Success

Bar:	Element:	Count:	Percent:	
1	YES	57	51.818	-Mode
2	NO	53	48.182	

SECONDARY RESISTANCE TO TB DRUGS STUDY

Out of 421 specimen received 167 C/S tests were performed in 1992 (all of them failure or relapse cases from the TBCP among the Afghan Refugees).
The secondary resistance rates were assessed as follows:
Streptomicine: 40% (48% in 1991)
INH: 48% (52% "" "")
Rifampicine: 44% (47% "" "")
Ethambutol: 28% (33% "" "")
Pyrazinamide 43% (56% "" "")
Thiacetazone: 35% (32% "" "")
Ethambutol is seldom used in the TBCP among the Afghan Refugees.
Some improvement was found if we compare the results with the previous year.

In 1992 we performed in our Referral Lab. 95 C/S tests (out of 150 specimen received) for failure or relapse cases sent by the Chest Unit of L.R.H. hospital and by the District TB Clinic-Peshawar.
All these samples belong to pakistani patients.
The secondary resistance rates were:
Streptomicine: 56%
INH: 69%
Rifampicine: 71%
Ethambutol: 65%
Pyrazinamide: 59%
Thiacetazone: 33%
Thiacetazone is seldom used in Pakistan.

Furthermore, as the multiple resistance is concerned, we assessed the following rates for the two groups of patients:

Afghan Refugees		Pakistani Patients
Sensitive to all drugs:	32%	13%
Resistant to 1 drug:	13%	7%
"" 2 drugs:	6%	8%
"" 3 drugs:	12%	21%
"" >than 3 drugs:	37%	51%
Total resistant:	68%	87%

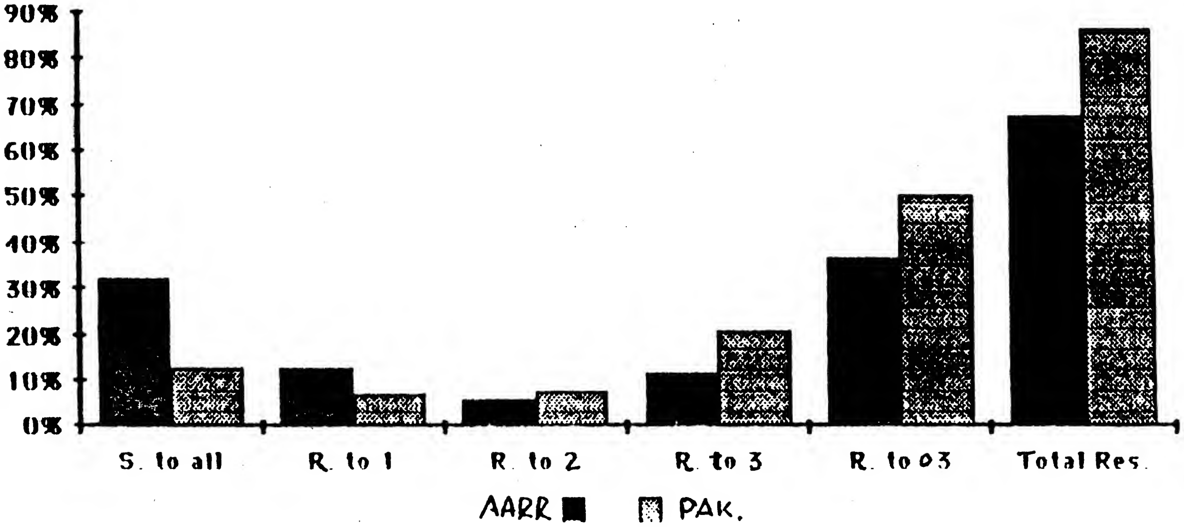
Since this was the first year we did C/S tests for such pakistani facilities, we may presume that some very chronic patients treated for a long time and still failure were included, while for the refugees group most of such patients were checked already in the previous years.

This may partially expound the differences within the two groups, but anyhow such disparities require our attention.

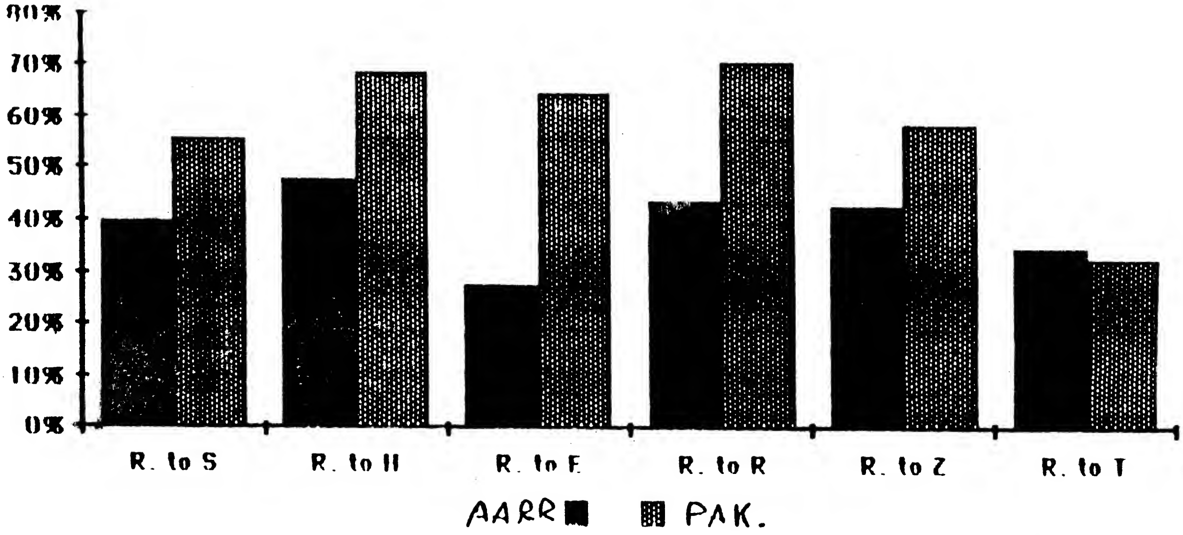
The average lost AFB+ patients among the refugees were always below 20%, and below 25% if we consider the transferred out patients as well. Often in Pakistani clinics the lost patients are more than 50% (we consider the government facilities whose data we know, we don't have any data for the private practitioners who problably treat the majority of the local patients). Meanwhile for the local population often medicines and sputa examinations are not free of charge, and there are not uniformed treatment and follow up protocols, and the defaulters are not traced, so to some extent such disparities are not unexpected.

These comparative results highlight the necessity of increasing the assistance provided to the TB patients, before the resistance to the drugs will rise further and will weaken the efficiency of all treatment regimens.

Multiple Resistance to TB drugs



Secondary Resistence to single TB drugs



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